and (i) and other communications stations for the operation of the vessel, such as the captain's and chief engineer's offices and staterooms, emergency power room, carbon dioxide (or other extinguishing agent) control room, and firepump room, must not be on the same circuit as communications stations installed to meet the requirements of §§ 113.30–5(e) and 113.30–5(h).

- (b) If a communications station is in the weather and on the same circuit as other required stations, there must be a cut-out switch on the navigating bridge that can isolate this station from the rest of the stations, unless the system possesses other effective means of station isolation during a fault condition.
- (c) Jack boxes or headsets must not be on a communications system that includes any station required by this subpart, except for a station installed to meet §§ 113.30–5(h) or 113.30–25(d).

[CGD 94-108, 61 FR 28289, June 4, 1996]

§113.30-25 Detailed requirements.

- (a) Each sound-powered telephone station must include a permanently-wired handset with a push-to-talk button and a hanger for the handset, except those stations detailed in paragraph (d) of this section. The hanger must be constructed so that it holds the handset away from the bulkhead and so that the handset will not be dislodged by the motion of the vessel.
- (b) Each voice communication station device in the weather must be in a proper enclosure as required in §111.01-9 of this chapter. The audible signal device must be outside the station enclosure
- (c) Each station in a navigating bridge or a machinery space must be in an enclosure meeting at least NEMA 250 Type 2 or IEC IP 22 requirements.
- (d) In a noisy location, such as an engine room, there must be a booth or other equipment to permit reliable voice communication during vessel operation.
- (e) In a location where the voice communication station audible signal device cannot be heard throughout the space, there must be an additional audible signal device or visual device, such as a light, which is energized from the final emergency bus.

- (f) If two or more voice communication stations are near each other, there must be a means that indicates the station called.
- (g) Each voice communication talking circuit must be electrically independent of each calling circuit. A short circuit, open circuit, or ground on either side of a calling circuit must not affect a talking circuit. Circuits must be insulated from ground.
- (h) Each connection box must meet at least NEMA 250 Type 4 or 4X or IEC IP 56 requirements.
- (i) Voice communication cables must run as close to the fore and aft centerline of the vessel as practicable. The cable must not run through high firerisk spaces, such as machinery rooms and galleys, unless it is technically impractical to route them otherwise or they are required to serve circuits in the high-risk area. Cable running through or into these high-risk areas must meet the requirements of EC 331.

[CGD 94–108, 61 FR 28289, June 4, 1996; 61 FR 33045, June 26, 1996; 61 FR 36787, July 12, 1996, as amended at 62 FR 23910, May 1, 1997]

Subpart 113.35—Engine Order Telegraph Systems

§113.35-1 Definitions.

As used in this subpart:

- (a) *Indicator* means an instrument in the engine room to receive and acknowledge engine orders; and
- (b) *Transmitter* means an instrument to send engine orders to the engineroom and receive acknowledgement from the engineroom.

$\S 113.35-3$ General requirements.

- (a) Each self-propelled vessel, except as provided in paragraph (d) of this section, must have an electric or mechanical engine order telegraph system from the navigating bridge to the engineroom.
- (b) On a vessel with more than one propulsion engine, each engine must have this system.
- (c) On a double-ended vessel that has two navigating bridges, this system must be between the engineroom and each navigating bridge.
- (d) If a small vessel has no engine order telegraph system between the

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navigating bridge and the engineroom, the propulsion plant must be controlled entirely from the navigating bridge, with no means of normal engine control from the engineroom.

- (e) On vessels equipped with pilothouse control, each local control station in the engineroom must have an indicator if:
- (1) Manual operation from the local control station is an alternative means of control; and
- (2) The local control station is not immediately adjacent to the engineroom control station; and
- (3) Reliable voice communication and calling that meets the requirements of §113.30–5(h) is not provided.
- (f) Engine order telegraph and remote propulsion control systems must be electrically separate and independent, except that a single mechanical operator control device with separate transmitters and connections for each system may be used.

[CGD 74-125A, 47 FR 15272, Apr. 8, 1982, as amended by CGD 81-030, 53 FR 17847, May 18, 1988; CGD 94-108, 61 FR 28290, June 4, 1996]

§113.35-5 Electric engine order telegraph systems.

- (a) Each electric engine order telegraph system must have transmitters and indicators that are electrically connected to each other.
- (b) Each engineroom indicator must be capable of acknowledgment of or-
- (c) There must be an audible signal at each instrument. The signal at both locations must sound continuously when the transmitter and the indicator do not show the same order.
- (d) Each telegraph instrument must meet the protection requirements of §111.01-9 of this chapter.
- (e) Each system must have an alarm which— $\,$
- (1) Automatically sounds and visually signals a loss of power to the system:
 - (2) Is on the navigating bridge; and
- (3) Has a means to reduce the audible signal from 100 percent to not less than 50 percent.

[CGD 74-125A, 47 FR 15272, Apr. 8, 1982, as amended by CGD 94-108, 61 FR 28290, June 4, 1996]

§113.35-7 Electric engine order telegraph systems; operations.

- (a) Where two or more transmitters, located on or on top of, or on the wings of, the navigating bridge operate a common indicator in the engineroom, the transmitters must:
- (1) Operate in synchronism as required in paragraph (b) of this section; or
- (2) Operate under the control of a transmitter transfer control in accordance with paragraph (c) of this section.
- (b) All transmitter handles and pointers must operate in synchronism. Where the transmitters are mechanically interlocked to effect synchronous operation, the requirements of §113.35–13 must be met.
- (c) Except for a transmitter in an unattended navigating bridge on a double-ended vessel, each transmitter must operate under the control of a transmitter transfer control so that movement of any one transmitter handle automatically connects that transmitter electrically to the engineroom indicator and simultaneously disconnects electrically all other transmitters. The reply pointers of all transmitters must operate in synchronism at all times.
- (d) On a double-ended vessel that has two navigating bridges, a manually operated transfer switch which will disconnect the system in the unattended navigating bridge must be provided.

[CGD 74-125A, 47 FR 15272, Apr. 8, 1982. Redesignated and amended by CGD 94-108, 61 FR 28290, June 4, 1996]

§113.35-9 Mechanical engine order telegraph systems.

- (a) Each mechanical engine order telegraph system must consist of transmitters and indicators mechanically connected to each other, as by means of chains and wires.
- (b) Each transmitter and each indicator must have an audible signal device to indicate, in the case of an indicator, the receipt of an order, and in the case of a transmitter, the acknowledgment of an order. The audible signal device must not be dependent upon any source of power for operation other than that